

# ABSTRACT

5 A rotational angioplasty device having a handle housing  
and an exchangeable drive shaft cartridge. The handle  
housing includes a rotatable prime mover carried by a  
prime mover carriage which is longitudinally movable  
with respect to the handle housing. The exchangeable  
10 drive shaft cartridge includes a tubular core element,  
a longitudinally extendible tube, a catheter and a  
rotatable drive shaft which, near its distal end, has  
an abrasive tissue removal implement. The cartridge is  
detachable from the handle housing, the longitudinally  
15 extendible tube is detachable from the prime mover  
carriage, and the drive shaft together with its tissue  
removal implement may be attached to and detached from  
the prime mover, thereby permitting the exchangeable  
drive shaft cartridge to be selectively attached to and  
20 detached from the handle housing. A coupling is  
provided which connects the longitudinally extendible  
tube to the prime mover carriage while indexing the  
relative position of the longitudinally extendible tube  
and the proximal portion of the drive shaft.

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